NEGATIVE DECLARATION

Submitting: ☒ **Draft**
☐ **Final**
☒ **Mitigated Negative Declaration**

Project Title: Former Fort Ord Range 36A Closure Plan

State Clearinghouse Number:

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Project Location (*Include County*):

Former Fort Ord, Monterey County.

Project Description:

The project is closure of an open burn/open detonation (OB/OD) hazardous waste management unit (HWMU) known as Range 36A at the Former Fort Ord. Range 36A is an approximately 200-foot by 400-foot area within the Impact Area (Inland Ranges) in Impossible Canyon. Range 36 A was operated by the 49th Ordnance Detachment FORSCOM Field Operating Activity for disposing of commercial explosives and military ordnance and ammunition between sometime in the 1940s and October 1992. Range 36A was listed in the 1980 Resource Conservation and Recovery Act (RCRA) Part A Application as a treatment unit for disposal of "Explosives (duds, etc.) detonated in impact areas, 25 lb limit per detonation, about 1500 lb/year." The range was reactivated from January 1994 until January 1995 for disposing of unexploded ordnance (UXO) identified by Fort Ord's Time Critical Removal Action Program for UXO and ordnance and explosive waste found outside of the Impact Area. Range 36A will be closed as an interim status HWMU because a final RCRA permit decision was not issued for Range 36A.

Based on the results of site characterization investigations, the Closure Plan does not include any further action related to chemicals in soil or groundwater at Range 36A. During investigations of Range 36A in 1990 and 1993, 70 soil samples were collected and analyzed for metals and 69 samples for explosive compounds. None of the metals were found at concentrations that exceed current Fort Ord cleanup standards for unrestricted use of the property (residential scenario). The explosive compounds RDX (cyclotrimethylenetrinitamine) and HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine) were detected in 9 samples and 5 samples, respectively. The maximum concentration of RDX was 16.5 milligrams/ kilogram (mg/kg) and three of the samples exceeded the cleanup standard (residential, based on 10^{-6} excess cancer risk) of 4.4 mg/kg. The maximum concentration of HMX was 1.84 mg/kg, which did not exceed the cleanup standard (residential, non-cancer risk) of 803 mg/kg. Because RDX only exceeded the cleanup standard in surface soil samples and RDX degrades in sun light, another site investigation was conducted in 2003 to determine if RDX concentrations were still greater than the cleanup standard. Ten soil samples were analyzed for RDX and RDX was only detected in one sample, at 1.4 mg/kg, which is less than the cleanup standard of 4.4 mg/kg. For the site investigation in 2003, DTSC also requested that soil samples be analyzed for perchlorate and dioxins. Perchlorate was not detected in any of the soil samples. The maximum result for dioxins was a toxic equivalent concentration of 3.8 nanograms/kilogram (ng/kg). Seven of the ten dioxins results were less than 1 ng/kg, which is equivalent to 1 part per trillion. The cleanup standard for dioxins is a toxic equivalent concentration of 3.9 ng/kg. Therefore, chemicals potentially related to the OB/OD activities at Range 36A, such as metals, explosive compounds, perchlorate and dioxins were not detected at concentrations greater than concentrations considered to be safe for human health and the environment at Fort Ord.

In order to address the possibility that munitions and explosives of concern (MEC) may be present at Range 36A, the Closure Plan includes a munitions response workplan. The types of material that may be encountered are: MEC items; munitions debris that is contaminated with explosives or other hazardous materials; non-hazardous munitions debris; small arms ammunitions (.50 caliber and below); and, general metallic debris. The Munition with the Greatest Fragmentation Distance (MGFD) that may be found is the M48 75-mm [High Explosive (HE)] Projectile with a minimum separation distance (MSD) of 1,701 feet. The munitions response consists of activities such as, vegetation removal, surface removal of military munitions, geophysical investigation, sub-surface investigation of potential locations of MEC, disposal of hazardous MEC by detonation, and disposal of debris free of explosives at an authorized facility. The

procedures for removal of MEC are included in an Explosives Safety Submission (ESS) approved by the Department of Defense (DoD) Explosives Safety Board. The results of the munitions response will be reported to DTSC in a Closure Certification Report. The munitions response field activities are planned to take approximately 6 weeks and the Closure Certification Report will be submitted to DTSC approximately two months after the completion of field activities. Depending on the timing of DTSC's approval of the Closure Plan, the munitions response field activities are expected to take place prior to the start of the rainy season in 2005 or after the rainy season in 2006 when field conditions are acceptable.

Due to the limitations of the geophysical methods for investigating the potential presence of MEC, Range 36A will not be acceptable for future unrestricted use. Range 36A lies on property that will remain under the ownership and control of the Army until it is transferred to the Department of the Interior, Bureau of Land Management. The Army does not possess the authority to encumber actively-held property, and Range 36A will be transferred from one federal agency to another. Under these conditions it is not feasible to establish a land use covenant in accordance with California Code of Regulations, title 22, subsection 67391.1(b). California Code of Regulations, title 22, subsections 67391.1(e)(2) and 67391.1(f) apply to this situation and allow alternative institutional controls. Controls on use of Range 36A already exist in the Army's munitions Response Site (MRS) Security Program, which was implemented in 1997. The MRS Security Program includes the following measures to protect the community from explosive hazards:

1. Conducting MEC removal actions, which will occur at Range 36A as described in the munitions response plan.
2. A 4-strand barbed wire fence and concertina wire around the Impact Area, which includes Range 36A.
3. Locked chain-link gates at access points to the Impact Area.
4. Posting warning signs and "no trespassing" signs on the barbed wire fence.
5. Security patrols.
6. Public education.

DTSC will be working with the Department of the Interior, Bureau of Land Management on a management plan that will result in safe reuse when the property including Range 36A is transferred.

During the operation of Range 36A there was the possibility that MEC may have been "kicked out" of the 200-foot by 400-foot HWMU boundary. Investigation and removal of this kicked-out MEC will not be conducted as part of the closure of Range 36A. The corrective action for the potential kick out area will be completed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program for the Impact Area under the oversight of the United States Environmental Protection Agency and the Department of Toxic Substances Control, Office of Military Facilities.

Findings of Significant Effect on Environment:

Based on the attached Initial Study, dated September 30, 2005, the proposed project COULD NOT have a significant effect on the environment.

Mitigation Measures:

The following mitigation measures will be employed as warranted by the site conditions.

Additional Project Controls for Former Fort Ord Range 36A

The following text is excerpted from the U.S. Fish and Wildlife Service's (U.S. FWS) biological opinion (1-8-04-F-25R) issued on March 14, 2005. Some text has been slightly revised to remove references to brush clearing using fire because that method will not be employed during this project.

The Army has proposed the following conservation measures to minimize the adverse effects of munitions response actions on the California tiger salamander, the other species of concern addressed in the Habitat Management Plan (HMP) (termed "HMP species" in the biological opinion), and critical habitat for Contra Costa goldfields.

1. Conduct Employee Education Program. A biologist familiar with HMP species will present the training to all supervisors and field personnel prior to the beginning of any ordnance and explosives (OE) investigations or removal activities and to any new personnel prior to their beginning work on the project. Topics covered in the training will include

a description of HMP plant and wildlife species that could be encountered in the project area, environmental laws related to the conservation of these species, guidelines that personnel must follow to reduce or avoid impacts to HMP species, and the appropriate points of contact to report unforeseen impacts on HMP species.

2. Prepare a habitat checklist that identifies HMP resources present and recommends measures to reduce or avoid impacts during the pre-disposal actions.

3. Flag the population boundaries of HMP species to the extent possible to avoid unnecessary disturbances.

4. Set-aside topsoil during excavations and replace it once excavations are back-filled.

5. Schedule excavations to occur after Contra Costa goldfields (and other special status plants) plants have set seed, to the extent possible.

6. Avoid vegetation clearance within occupied Contra Costa goldfields area since the vegetation is typically low growing (less than 6 inches) and does not limit safe access.

7. Restrict munitions response site to the smallest area possible to limit unnecessary disturbance of habitat, while still allowing for the safe and effective removal of explosive hazards. Place access roads, fuel breaks, staging areas, and other necessary support facilities so as to avoid areas containing HMP plant and wildlife species and maritime chaparral vegetation, when possible. Use existing roads whenever possible and minimize use of vehicles off roads to the greatest extent practicable.

8. In munitions response special-case areas, use existing fuel breaks and established dirt road for target removal when available. When targets are further from existing roads, a safety team will determine access routes using the safest route from the existing road to the range target, taking into consideration the route with the least biological impacts.

9. After it is determined that a range target can be moved safely, it will be hauled over the same access route to return to the existing road. This “one-time-in/one-time-out” procedure will be performed in a manner that minimizes impacts to the habitat. For multiple targets that are in close proximity to each other, the same access route may be used again if doing so would reduce the impact on the environment.

10. Conduct follow-up visits to munitions response site to identify potential erosion areas and apply weed-free straw as necessary.

11. Monitor wetland and chaparral habitats affected by munitions responses actions annually for five years to document recovery of HMP species and their habitats and implement corrective actions if necessary. This is an iterative process designed to improve the Army’s ability to implement the remediation in a manner that effectively conserves listed and sensitive species and their habitats.

12. Consider HMP plant species recovery successful, if at the end of 5 years: (1) self-sustaining populations in different stages of succession result within a mosaic of maritime chaparral habitat, (2) the amount of occupied habitat varies over time within a range that was estimated for these species in 1992, and (3) population sizes vary from year-to-year within a range that was estimated for these species in 1992.

Habitat Management Plan for Predisposal Actions
Mitigations for Parcel F.1.7.1

The following are excerpts from Chapter 3, Predisposal Actions, U.S. Army Corps of Engineers Installation-Wide Multispecies HMP for Former Fort Ord, California, April 1997.

Mitigation measures for impacts on HMP species and habitats resulting from OE sampling and removal activities will be implemented at all sites not planned for development. The primary objective of mitigation efforts is to reestablish healthy, high-diversity maritime chaparral habitat that has a variety of seral stages and age classes and that includes microhabitat for sand gilia, Monterey spineflower, Seaside bird’s beak, and black legless lizard.

The health of maritime chaparral is marked by successful establishment of this community’s component species, many of which are HMP species (i.e., sandmat manzanita, Monterey ceanothus, Eastwoods’s ericameria, Toro manzanita, and Hooker’s manzanita).

Specific mitigation measures for vernal pools and ponds are also provided to minimize potential impacts on California linderiella, California tiger salamander, and red-legged frog.

During the Project, the following measures will be implemented:

Minimize Disturbance Associated with OE Removal

OE removal sites will be restricted to the smallest area possible to limit unnecessary disturbance of habitat. Placement of all access roads, staging areas, and other appurtenant facilities will attempt to avoid areas containing HMP plant and wildlife species and maritime chaparral vegetation. Existing roads will be used whenever possible and use of vehicles off roads will be minimized to the greatest extent practicable.

Avoid Disturbance of Sand Gilia and Seaside Bird's-Beak Populations

Where feasible, avoid populations of sand gilia and Seaside bird's-beak. Fence or flag known populations and educate ordnance clearing crews as to the location and identification of these species.

Conduct Employee Education Program

Before OE removal or sampling activities begin, all supervisors and field personnel must attend a brief environmental training program. The training program will be presented by a qualified biologist familiar with the HMP plant and wildlife resources at former Fort Ord. As the project proceeds, all new personnel must attend an environmental training session before working on the site. Topics to be covered in the training session include:

- A description of HMP plant and wildlife species that could be encountered in the project area,
- Pertinent state and federal laws relating to the conservation of these species,
- Guidelines that personnel must follow to reduce or avoid impacts on HMP species, and
- The appropriate contacts to report unforeseen impacts on HMP species.

Minimize and Compensate for Impacts on California Linderiella, California Tiger Salamander, and California Red-Legged Frog

Vernal pools are considered potential habitat for California linderiella and California tiger salamander.* Ponds also provide potential habitat for these two species, as well as for the California red-legged frog. Vernal pools and ponds will be avoided whenever possible during cleanup of OE. However, if these habitats must be disturbed during removal of OE (i.e., during excavation or in situ detonation of OE), a mitigation and habitat restoration plan will be developed and implemented for each vernal pool or pond that is affected.

Mitigation and habitat restoration plans will include measures to minimize disturbance to ponds and vernal pools during ordnance removal. Methods for reducing disturbance include minimizing excavation area and depth, completing in situ detonation in a manner that minimizes soil disturbance, and setting aside topsoil during excavation to salvage plant seeds and California linderiella eggs. Before any vernal pool or pond is disturbed, it will be surveyed and all data described in the monitoring section below will be collected.

The goal of restoration plans will be to restore affected wetlands so that they are of the same acreage and provide the same functions as before clearing of ordnance. Restoration objectives would include establishment of self-sustaining populations of California linderiella, California tiger salamander, and California red-legged frogs similar to those that existed before ordnance removal.

Minimize Impacts on Black Legless Lizards

Potential habitat for black legless lizards has been identified in the western portion of the inland range area and other locations. Designation of suitable habitat was based on soil and vegetation conditions favorable to black legless lizards; however, the area has not been surveyed for the species.

Because of the difficulty and safety hazards associated with surveying for legless lizards in areas that many contain OE, all areas identified on maps in the HMP as potential habitat for the black legless lizard are considered occupied.

*Refer to the California tiger salamander provisions above, excerpted from the U.S. FWS Section 7 biological opinion.

If a legless lizard is encountered during excavation of OE, maximum effort will be made to preserve the animal without unreasonably delaying excavation activities. The lizard will be captured by hand, making all efforts possible not to injure the animal. The first option for treatment is to release an unharmed lizard after the excavation or ground disturbing activity is completed. The lizard will be placed in a plastic container loosely filled with moist paper towels. If an injured or dead specimen is taken, a predetermined contact from the U.S. FWS or the California Department of Fish and Game (CDFG) will be notified immediately and may receive the specimen or recommend an appropriate person to receive the specimen. The live lizard either will be kept temporarily until activities are complete in the area where it was encountered and then released as near as possible to the point of capture, or it will be kept in captivity until the following spring and released in suitable habitat as near a s possible to the point of capture. If the lizard encountered is dead, the person receiving the specimen will identify the species of legless lizard and give the specimen to an appropriate agency or institution.

Success Criteria:

Healthy maritime chaparral habitat is described in Chapter 2 of the HMP Habitats section. This description and comparisons with undisturbed sites supporting maritime chaparral should be used to measure the success of restored habitat. The restored habitat will consist of naturally regenerating maritime chaparral that is managed using controlled burning and other techniques that maximize the habitat value for HMP species.

The acreages of habitat occupied by sand gilia, Monterey spineflower, and Seaside bird's-beak at low, medium, and high densities in areas in the inland range where some amount of OE is expected to occur are shown in Table 1 may represent about 8,000 to 12,000 individual sand gilia plants, 5,000 to 10,000 Seaside bird's-beak plants, and 4-7 million Monterey spineflower plants in the inland range area. This does not include areas outside the inland range where there is potential for OE. Restoration for these species will be considered successful if, at the end of 5 years:

- Self-sustaining populations result within a mosaic of maritime chaparral habitat in different stages of succession,
- The amount of occupied habitat varies over time within a range that includes amounts similar to the amount of habitat estimated for these species in 1992, and
- Population sizes vary from year to year within a range that increase annual populations similar in size to those estimated for these species in 1992.

In many instances, suitable habitat, occupied habitat, and populations of two or all three of these species will occur on the same site.

Vernal pool and pond restoration will be considered successful if affected wetlands are of the same acreage and provide the same functions as before clearing of ordnance. Also, if affected wetlands supported California linderiella, California tiger salamander, or California red-legged frogs before ordnance removal, they must support self-sustaining populations of these species for 5 years after restoration is complete.

Table 1
Approximate Acres of Habitat Supporting Sand Gilia, Monterey Spineflower, and Seaside Bird's-Beak in Areas in the Inland Range Expected to Contain OE

Plant	Acres of Habitat in Areas Where Unexploded Ordnance Expected to Occur
Sand gilia*	
Low density	1,115
Medium density	20
High density	0
Monterey spineflower*	
Low density	2,135
Medium density	1,780
High density	410
Seaside bird's-beak*	
Low density	390
Medium density	15
High density	0

*The above data is from a 1992 survey.

Each patch of maritime chaparral cleared of ordnance will be monitored annually for 5 years beginning with the year of ordnance removal activities. In most cases, the monitored site will be delineated by the edge of a controlled burn area established before ordnance removal. Because ordnance removal will occur over several years, the 5-year monitoring period for groups of ordnance removal sites will be initiated in different years. The reestablishment of vegetation will be measured at each ordnance removal site, using relieve, quadrant, transect, or a combination or vegetation survey methods. Each monitoring year, the following information will be recorded for each ordnance removal site:

Size of the site in acres (first year only);
Method used to clear vegetation (e.g., burning, chipping, none) first year only);
Extent of soil disturbance from ordnance removal (first year only);
Percent absolute vegetative cover;
Percent cover of each woody plant species present (including HMP shrubs);
Percent herbaceous cover and list of dominant herbaceous species;
Percent cover by nonnative weedy plants;
Estimated number of plants and mapped location of sand gilia, Monterey spineflower, Seaside bird's beak, and coast wallflower;
General wildlife use;
Vegetation establishment record through color photographs.

A protocol for conducting vegetation sampling at former Fort Ord has been developed to guide monitoring efforts (U.S. Army Corps of Engineers, Sacramento District, 1995). The protocol and results of monitoring efforts are being coordinated with the Coordinated Resource Management and Planning (CRMP) process, U.S. FWS, and others. With ordnance removal sites varying from approximately 200 to 400 acres in size and the inland range comprising approximately 8,000 acres, there should be between 20 to 40 sites to be monitored for habitat reestablishment. This number could be reduced based on the final size of the Restricted/Administrative area. This information will be analyzed and complied into annual monitoring reports. Conclusions drawn from the data in monitoring reports will be used to modify subsequent burning and ordnance clearing actions to promote more effective restoration of healthy, diverse maritime chaparral and habitat and populations of HMP species. The level of detail of monitoring data for maritime chaparral and associated HMP species may be adjusted over time, as the level of detail necessary to judge mitigation success is better understood through the results of monitoring the initial sites of vegetation clearing, ordnance cleanup, and vegetation reestablishment.

Restored vernal pools and ponds will be monitored during each rainy season for 5 years after restoration is completed. Each monitoring year, the flowing information will recorded for each restored vernal or pond:

- Dates each pool or pond begins to fill and when it dries relative to timing and abundance of yearly rainfall;
- Water conditions, including depth, surface area, turbidity, and pH;
- Percent submergent, floating, and emergent vegetative cover (estimated using transects, quadrants, or other appropriate techniques) and species composition; and
- Occurrence and relative abundance of California linderiella adults and adults and larvae of California tiger salamander California red-legged frog.

This information will be analyzed and complied into annual monitoring reports. Conclusions drawn from the data in monitoring reports will be used to modify subsequent ordnance removal practices in wetland habitats and implementation of future vernal pool and pond restoration plans. The level of detail of monitoring data for vernal pools and ponds may be adjusted over time, as the level of detail necessary to judge mitigation success is better understood through the results of monitoring the initial sites of vernal pool and pond restoration.

Corrective Measures

Based on the results of each year's monitoring, the restored maritime chaparral habitat management will be modified, if necessary, to meet success criteria. In some instances, supplemental weeding, planting, or seeding may be needed to meet the established success criteria.

Improvement of sand gilia, Monterey spineflower, and Seaside bird's-beak habitat will be conducted if population levels for these species do not meet the success criteria.

If success criteria for vernal pool and pond restoration are not satisfied, corrective measures will be developed on a case-by-case basis to identify the cause of failure. Previous monitoring data will be analyzed, and, if necessary, specific studies will be undertaken to determine the reason for failure to meet success criteria. Corrective measure will be developed to respond to the cause of noncompliance determined from these data. An appropriate corrective measure must be implemented within 1 year of determination that success criteria will not be satisfied, and the vernal pool or pond will be monitored for additional 3 years after implementation.

U.S. FWS, DFG, and the Army will review all proposed wetland corrective measures before they are implemented. If, after two attempted corrective measure success criteria are still not satisfied, another mitigation site will be chosen for vernal pool or pond enhancement or creation.

DTSC Branch Chief Signature		Date
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